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ABSTRACT:

The invention relates to a method of producing a single-strength spectacle lens while taking into account an individual spectacle wearer's data, the single-strength spectacle lens having a rotationally symmetrical base surface and a rotationally symmetrical aspherical or atoric prescription surface, comprising the following steps:

- Acquisition of an individual spectacle wearer's data;
- selection of a spectacle lens blank with a predetermined base surface from a group of spectacle lens blanks; and
- calculation and optimization of the prescription surface while taking into account at least a part of the individual spectacle wearer's data in addition to an adaptation of the dioptric effect by the prescription surface to the spectacle wearer's prescription.

The invention also relates to a corresponding system for producing a single-strength spectacle lens and to an individual single-strength spectacle lens.

Translation of Figures:

Figure 1:

1. Providing of the base surfaces

2. Input of the individual data

Dioptric effect of the prescription.

Centering demand.

Ametropia and binocular status

Habitual head and body posture.

Eye rotation point distance, overall length
of the eye and the corneal vertex distance,
interpupillary distance, forward tilt, lateral
tilt and rim disk angle.

Object distance.

Visual acuity.

Vision demand.

Rim Shape.

Application field.

3. Selection of the suitable base surface.

4. Calculation of the desired definitions for each viewing point through the lens while taking into account all of the individual customer's data.
5. Online calculation and optimization of the prescription surface while taking into account all of the individual customer's data in the usage position.

Figures 2 and 3:

Stand der Technik = state of the art